Stalling may undermine regulation of coal-plant emissions

Ronald Brownstein The Los Angeles Times Salt Lake Tribune Article Last Updated:04/12/2007 07:24:22 PM MDT

An ominous collision is approaching between Washington's legislative and regulatory agenda and the investment plans of the nation's largest utilities. Unless these blueprints are aligned, meaningful progress against global warming could be foreclosed for years, or even decades.

Mandatory limits on carbon dioxide and other gases that contribute to global warming appear inevitable after a U.S. Supreme Court decision last week. By ruling that greenhouse gases qualified as air pollutants under the Clean Air Act, the court virtually required the Environmental Protection Agency to regulate them - and increased the likelihood that Congress will impose limits as well. But with President Bush opposed to compulsory reductions, none is likely until he leaves office.

Many utilities accept the inevitability of restraints on greenhouse-gas emissions, but most won't act unless they are required to act. And while Washington delays in establishing such requirements, utilities are making investment decisions that could undermine whatever strategy the nation finally adopts.

With demand for electricity expected to rise by about one-sixth through 2015, utilities are betting heavily on coal, even though it generates more carbon dioxide per unit of heat than oil or natural gas. Coal is attractive to utilities because it is plentiful and cheap. But coal is inexpensive largely because power plants are not required to capture the carbon they produce. Coal-fired plants contribute half the electricity produced in the United States but four-fifths of the carbon emissions associated with electrical generation. Coal-fired plants, in fact, contribute almost one-third of all the carbon emissions the United States generates - roughly as much produced by every car and truck on the road. No future federal effort against global warming could succeed without slashing those coal-related emissions.

Yet the Department of Energy recently reported that U.S. utilities are planning to build 150 more coal-fired power plants through 2030, with nearly half slated for operation by 2011. Utilities say they have no alternative to meet the growing demand, but power plants operate for 50 years. By relying too heavily on coal to meet their near-term supply challenge, utilities could threaten progress against global warming for decades.

"The biggest threat to a rational global warming policy is we delay acting two to four years and utilities build a lot of new sources that make it impossible to take action," said Bruce Nilles, a Sierra Club attorney.

Technological advances may someday reduce that danger. Researchers are exploring systems that capture carbon dioxide emissions from coal-fired power plants and sequester the gas underground. But these efforts are nascent: The largest project, in Norway, is storing only about one-third as much carbon as an average coal plant produces.

Some public figures, such as former Vice President Al Gore, 2008 Democratic presidential candidate John Edwards and outspoken NASA climate scientist James Hansen, want to ban new coal-fired plants until this clean coal technology is proved. That's probably more than the economy could bear. But until research demonstrates the technological and economic feasibility

of "capture and sequester" systems, officials should seek to limit new coal plant construction to the bare minimum.

One precedent that states could apply is the new California law prohibiting purchase of electricity from plants that generate substantial greenhouse-gas emissions. Democratic Sens. Barbara Boxer of California and Jeff Bingaman of New Mexico recently sent a useful signal by warning that any federal global-warming legislation was unlikely to "grandfather" heavily emitting coal plants completed before its passage.

Even the utility industry should think twice; conventional coal plants built today inevitably will face expensive retrofitting to meet future emission standards. American Electric Power Co., a large Midwest utility, last month announced plans for the first capture-and-sequester retrofits on existing coal plants. But Michael G. Morris, company chairman and chief executive, says the better approach is to build all-new plants "from this point forward addressing the global warming issue."

As Morris notes, that would require fresh thinking from state regulators, who currently don't allow utilities to pass on the cost of limiting carbon emissions, because federal law doesn't require it. It would also require sacrifice from consumers. Wind and solar could fill some of the gap if utilities slow their planned additions in coal-fired power while cleaner technologies are tested. But any turn from coal would also demand conservation, likely enforced through higher prices for electricity.

Moving away from conventional coal too abruptly might disrupt the economy. But sticking with it too long would surely doom our efforts to stabilize the environment. The best formula would be to accelerate research on technologies that promise cleaner coal - and to slow the deployment of conventional coal plants until that research catches fire.